

### Abstract

The invention concerns a valve arrangement (1) with a housing (2), an inlet connection (3) and an outlet connection (4), which are connected with each other via a flow path, in which is located a closing device (5), which has a valve seat (7) and a valve element (6) interacting with the valve seat (7), the valve element (6) being loaded in the direction of the valve seat (7) by a resetting device (8) and being acted upon on the side facing the valve seat (7) by a pressure in a first pressure chamber (9), said pressure corresponding to the pressure in the inlet connection (3), when the closing device (5) is closed, and on the side facing away from the valve seat (7) by the pressure in a second pressure chamber (11), which is connected with the outlet connection (4) via a channel arrangement (14), in which is located at least one auxiliary valve (15), and with the first pressure chamber (9) via a throttle (13). It is endeavoured to reliably ensure that the closing device (5) opens. For this purpose, it is provided that the channel arrangement (14) ends in a suction nozzle arrangement (18), which is located in the flow path.